

Three *Nepenthes* from the Padang Highlands

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The Padang Highlands are situated near the equator in West Sumatra. The principal town in this region is Bukittinggi which is nestled between the two mountains, Mt. Merapi (2,891 m) and Mt. Singgalang (2,671 m). Much of the Padang Highlands are covered in rice fields although the higher mountainous regions are concealed in lush tropical rainforest.

There are unmarked walking tracks to the summits of both Mt. Merapi and Mt. Singgalang. These tracks are extremely steep and treacherous, particularly after rain. The ascent and descent of each mountain requires a full day's steady scramble. During April 1983 an expedi-

tion to the summits of Mt. Merapi and Mt. Singgalang was undertaken. Three species of *Nepenthes*, *Nepenthes bongso* Korth., *Nepenthes gymnamphora* Nees and *Nepenthes singalana* Becc. were observed and photographed.

Mt. Merapi was an active volcano that last erupted in 1926. The summit of the mountain is devoid of vegetation and covered in pumice stone and solidified lava. A strong odour of sulphur permeates the air near the summit.

An ericaceous forest begins at about 2,500 m on Mt. Merapi. In the gulleys at 2,600 m several plants of *Nepenthes bongso* (Continued on page 12)

Byblis liniflora

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This annual species proves very easy in cultivation. It is easily grown from seed, however the seed needs a resting period before sowing, and it will not germinate if the temperature is too low. Seed harvested in late autumn, should be stored in the fridge until early spring, when it can be sown on a mixture of 2 parts peat to 1 part sand.

I find a 100 mm pot adequate to accommodate 6-8 plants, and I prefer to grow this many to a pot; they tend to support each other, as they develop quite a long stem in their growing season. Without support, they tend to trail over other pots, and make a nuisance of themselves.

Watering is easy, using a water tray, with a depth of water of around 26 mm. A sunny location, with a little shade, seems to suit this species very well. In

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Byblis liniflora



Mt. Singgalang in the Padang Highlands.



Mt. Merapi with Bukittinggi in the foreground.



Fruits of *Nepenthes bongso*.

were found. The lower pitchers were dark red and similar to those of *Nepenthes sanguinea* Lindl. which is found in Peninsular Malaysia (Shivas, 1983). However, *Nepenthes bongso* had a distinct toothed inner margin on the peristome. Furthermore, *Nepenthes bongso* had a characteristic dense indumentum in the leaf axils. One lower pitcher was observed to have a spur on the under side of the lid at the base. According to Danser (1928) *Nepenthes bongso* is similar to *Nepenthes pectinata* Dans. However, the plants observed on Mt. Merapi did not have the ellipsoidal pitchers characteristic of the rosettes of *Nepenthes pectinata* and *Nepenthes gymnamphora*.

On Mt. Singgalang two species of *Nepenthes* were observed. At about 1,600 m *Nepenthes gymnamphora* was found growing along a ridge in dense rainforest. Lower pitchers were clustered on short shoots attached to lengthy vines. The vines of *Nepenthes gymnamphora* extended for up to 10 m to the uppermost canopy of the rainforest.

At the summit of Mt. Singgalang there is a crater lake that is about 100 m in diameter. Around this lake is a dense moss forest. In this moss forest *Nepenthes singalana* grew abundantly. *Nepenthes singalana* was described by Beccari in 1886 from specimens collected from Mt. Singgalang. His illustration of *Nepenthes singalana* typified the plants that we found at the summit of Mt. Singgalang. Although this species is also reminiscent of *Nepenthes sanguinea*, the pitchers of *Nepenthes singalana* have a distinctly ribbed peristome and almost horizontal mouth.

Seed of the three species *Nepenthes bongso*, *Nepenthes gymnamphora* and *Nepenthes singalana* was collected and has germinated successfully.

Danser, B.H. (1928) The Nepenthaceae of the Netherlands Indies. *Bulletin du Jardin Botanique*, Serie 3(9).

Shivas, R.G. (1983) *Nepenthes* of Gunung Ulu Kali. *Carnivorous Plant Newsletter*, 12(3): 65-67.

(All photos accompanying article by Roger Shivas.)



Upper pitcher of *Nepenthes singalana*.



Lower pitcher of *Nepenthes bongso*.



Rosette plants of *Nepenthes gymnamphora*.



Vine and plantlet of *Nepenthes singalana*.



Lower pitchers of *Nepenthes tobaica*.

Photos by Roger Shivas